

## **AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims:**

1. (Currently Amended) A system for translating closed caption data in a program broadcast-signal during broadcast of said program signal, said program signal comprising closed caption codes and closed caption text in a source language, comprising:

a closed caption decoder for ~~receiving said closed caption codes in said source language from said program broadcast-signal and~~ preprocessing said program signal for translation by extracting from said program signal said closed caption codes and closed caption text in said source language;

a server for

- (i) -receiving said closed caption codes and said closed caption text in  
said source language from said closed caption decoder;
- (ii) pre-editing said closed caption text in said source language to  
product translatable text for submission to machine translation  
software and
- (iii) -translating said closed caption text in said closed-caption  
code source language to closed caption text in a target language

using said machine translation software and said translatable text;

and

a device for receiving ~~translated~~ said closed caption codes and said closed caption text in said target language from said server, inserting said ~~translated~~ closed caption codes and said closed caption text in said target language ~~to in said~~ program broadcast signal ~~as closed caption codes in said target language~~, and transmitting said program broadcast signal to a program destination for broadcast to all viewers of said program broadcast signal, wherein viewers that select a closed caption viewing option on their televisions during broadcast of said program signal may view said ~~translated~~ closed caption text in said target language.

2. (Original) The system of claim 1 wherein said device is a closed caption encoder.
3. (Original) The system of claim 1 wherein said device is a subtitle.
4. (Original) The system of claim 1 wherein said device is a text-to-speech module.
5. (Original) The system of claim 1 wherein said signal is from a television broadcast.
6. (Original) The system of claim 1 wherein said signal is from a videotape recorder.
7. (Original) The system of claim 1 wherein said server comprises text flow management software.
8. (Canceled)
9. (Currently Amended) A method for translating closed caption data in program source signals during broadcast of said program source signals, said program source signals comprising closed caption codes and closed caption text in a source language, comprising the steps of:

receiving said program source signals;  
decoding closed caption codes and closed caption text from said closed  
caption ~~codes~~ data in said program source signals;  
pre-editing said closed caption text in to produce translatable text for  
submission to machine translation software;  
translating said closed caption text from said source language to a target  
language using said machine translation software and said translatable text;  
inserting said closed caption codes and said target language closed caption  
text in program destination signals; and  
broadcasting said program destination signals to a program destination for  
broadcast to all viewers of said program destination signals, wherein viewers that  
select a closed caption viewing option on their receivers during broadcast of said  
program destination signals may view said closed caption text in said target  
language.

10. (Original) The method of claim 9 wherein the step of receiving said program source signals comprises the step of receiving said program source signals from a broadcast.
11. (Original) The method of claim 9 wherein the step of receiving said program source signals comprises the step of receiving said program source signals from a videotape recorder.
12. (Currently Amended) The method of claim 9 wherein the step of inserting said target language closed caption text in program destination signals comprises the

step of inserting said target language closed caption text in program destination signals as subtitles.

13. (Currently Amended) The method of claim 9 wherein the step of inserting said target language closed caption text in program destination signals comprises the step of inserting said target language closed caption text in program destination signals as closed captions.
14. (Currently Amended) The method of claim 9 wherein the step of inserting said target language closed caption text in program destination signals comprises the step of inserting said target language closed caption text in program destination signals as a separate audio program.
15. (Currently Amended) The method of claim 9 wherein the step of ~~translating said text comprises the pre-editing~~ said closed caption text comprises the steps of:
  - identifying a topic to select a dictionary for translation;
  - correcting spelling errors;
  - identifying and demarcating sentence boundaries;
  - identifying and demarcating phrase boundaries;
  - identifying and demarcating personal, business and place names;
  - adding punctuation;
  - identifying ellipses and inserting text; and
  - detecting unaccented text and inserting accents.
16. (Original) The method of claim 15 further comprising the step of identifying a speaker.

17. (Currently Amended) An apparatus for translating closed caption ~~codes~~data  
comprising closed caption codes and closed caption text in a source language  
comprising:

a server adapted to

- (i) receive said closed caption codes and said closed caption text in  
said source language from a program broadcast during broadcast of  
said program;
- (ii) translate said closed caption text in said source language to closed  
caption text in a target language; and
- (iii) insert said closed caption codes and said closed caption text in said  
target language in program destination signals;
- (iv) transmit said program destination signals with said closed caption  
text in a said target language to a device for broadcast of said  
program broadcast destination signals with said closed caption text in  
said target language to a program destination, wherein viewers of  
said program broadcast destination signals that select a closed  
caption viewing option on their receivers during broadcast of said  
program destination signals may view said closed caption text in said  
target language; and  
pre-editing software on said server for preparing translatable text from said  
closed caption text in said source language for submission to machine translation  
software; and

machine translation software on said server for translating said closed caption text in said closed caption codes in said source language to said closed caption text in said target language using said translatable text.

18. (Canceled)

19. (Original) The apparatus of claim 18 wherein said pre-editing software is adapted to:

identify a topic to select a dictionary for translation;

correct spelling errors;

identify and demarcate sentence boundaries;

identify and demarcate phrase boundaries;

identifying and demarcating personal, business and place names;

add punctuation;

identify ellipses and inserting text to fill said ellipses; and

detect unaccented text and inserting accents.

20. (Currently Amended) The apparatus of claim 18 wherein said closed caption text in a said target language comprises translated titles.

21. (Canceled)

22. (Currently Amended) The apparatus of claim 18 wherein said closed caption text in a said target language comprises translated audio.